# PATENT COOPERATION TREATY

# **PCT**

# TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

P3S2004228		FOR FURTHER ACTION		See Form PCT/IPEA/416			
International application No. PCT/JP2005/001299		International filing date (data 25.01.2005	y/month/year)	Priority date (day/month/year) 20.02.2004			
International Patent Classification (IPC) or national classification and IPC							
F01C13/04 (2006.01) , F01C1/02 (2006.01) , F04B35/00 (2006.01) ,							
F04C18/02 (2006.01) , F04C23/02 (2006.01) , F25B9/00 (2006.01)							
Applicant							
TOYOTA JIDOSHA KABUSHIKI KAISHA							
1.	1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.						
2.	This REPORT consists of a total of sheets, including this cover sheet.						
3.	3. This report is also accompanied by ANNEXES, comprising:						
a. (sent to the applicant and to the International Bureau) a total of 5 sheets, as follows:							
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or						
	sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).						
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental						
	Box.						
	b (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))						
	, containing a sequence listing and/or tables						
related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).							
4.	This report contains indications relat	ing to the following items:					
	Box No. I Basis of the report						
	Box No. II Priority	Box No. II Priority					
	Box No. III Non-establ	ishment of opinion with regar	d to novelty, inventive	e step and industrial app	olicability		
	Box No. IV Lack of unity of invention						
	Bon 110. 1	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
	Box No. VI Certain documents cited						
	Box No. VII Certain defects in the international application						
	Box No. VIII Certain obs	Certain observations on the international application					
Date of submission of the demand			Date of completion of this report				
			-	_			
Name and mailing address of the IPEA/JP			Authorized officer				
Facsimile No.			Telephone No.				

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International application No.
PCT/JP2005/001299

Box	x No. I	Basis of the report						
1.	1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.							
	This report is based on translations from the original language into the following,							
	whic	h is the language of a translation furnished for the pur	poses of:					
		international search (Rule 12.3 and 23.1(b))						
	님	publication of the international application (Rule 12.4	4)					
		international preliminary examination (Rule 55.2 and	·					
2.	receiving (	With regard to the <b>elements</b> of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):						
	the ir	the international application as originally filed/furnished						
	the d	escription:						
	page	s <b>1-27</b>		as originally filed/furnished				
	page	s*	_ received by this Authority on					
	page	S*	received by this Authority on					
		laims:						
				: -11 61 4/6 :-1 1				
	nos.	5-7,15,21		as originally filed/furnished				
	nos.*			r with any statement) under Article 19				
	nos.*	1,4,8,10,14,19	_ received by this Authority on .	12.12.2005				
	nos.*	•	_ received by this Authority on .					
	the d	rawings:						
	sheet	s <b>1-23</b>		as originally filed/furnished				
	sheet	S*	_ received by this Authority on					
	sheet	s*	_ received by this Authority on					
	a seq	uence listing and/or any related table(s) – see Supplen	nental Box Relating to Sequence L	isting.				
3.	The :	The amendments have resulted in the cancellation of:						
		the description, pages						
		the claims, nos. 2-3,9,11-13,16-18,20,22-23						
		the drawings, sheets/figs the sequence listing (specify):						
	$\overline{\Box}$							
4.								
		This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).						
		the description, pages						
		the claims, nos.						
		the drawings, sheets/figs						
		the sequence listing (specify):						
	any table(s) related to sequence listing (specify):							
*	* If item 4 applies, some or all of those sheets may be marked "superseded."							

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### 2. Citations and explanations (Rule 70.7)

None of the documents cited in the international search report sets forth the following features, and said features would not be obvious to a person skilled in the art.

The feature set forth in claim 1, wherein "heat transferred from the aforementioned scroll compressor to the aforementioned spiral partition is radiated to the outside via the aforementioned compressor case".

The feature set forth in claim 8, wherein "the wall surface of the aforementioned expander is left damp".

The feature set forth in claim 10, wherein "the aforementioned spiral partition and the aforementioned compressor case are made from heat-conductive materials, and the aforementioned expander case is made from heat-resistant materials".

The feature set forth in claim 19, wherein "the aforementioned scroll compressor has a compressor case provided to the aforementioned first single side, and the scroll expander has an expander case provided to the

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

aforementioned second single side, and the aforementioned compression operation fluid path has through-holes which are formed in the aforementioned spiral partition, and said through-holes link the inside of the aforementioned compressor case to the inside of the aforementioned expander case".

Therefore, the inventions set forth in claims 1, 8, 10 and 19, and claims 4 to 7, 14, 15 and 21 which refer back to any one of these claims, are novel and involve an inventive step.